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Via electronic mail to ehren.seybert@cpuc.ca.gov

Reply Comments of the Sierra Club and the Vote Solar Initiative on the Scope of Work for the CPUC / E3 Net Energy Metering Study

The Sierra Club and the Vote Solar Initiative (Vote Solar) submit this informal reply to the comments submitted on November 5, 2012 on the proposed Scope of Work (SOW) for the Commission's Net Energy Metering (NEM) Study. These reply comments respond to only some of the issues raised in opening comments. The Sierra Club and Vote Solar join and support concurrent reply comments submitted by the Solar Energy Industry Association (SEIA) and the California Solar Energy Industries Association (CalSEIA) on additional issues not raised in these reply comments.

1. The Export-Only Scenario is Essential for an Impartial and Robust NEM Study and Required Under Commission Decision 12-05-036

The "export-only" case is not only critical to determining the costs and benefits of the NEM program, but essential to ensure the integrity of the NEM study and comply with the requirements of Commission Decision 12-05-036. Accordingly, SDG&E and PG&E's recommendation that the NEM Study omit the "export-only" case should be rejected.¹ D.12-05-036 requires an "updated, comprehensive study of the NEM program" to supersede an earlier 2010 Commission report on NEM cost effectiveness.² Because the 2010 Commission report analyzed the export-only case, it follows that the instant updated report do the same. Indeed, an abrupt about-face excluding the export-only case from the updated report in response to utility pressure would compromise the integrity of the NEM study. Moreover, as a legal matter, narrowing the NEM study to exclude the "export-only" case is fundamentally at odds with the "comprehensive" study ordered under Decision 12-05-036. To realize its informational purpose, the NEM study should analyze how the export-only and all-output cases respectively impact the costs and benefits of NEM.

SDG&E's assertion that AB 2514 prohibits the consideration of the "export only" case in the NEM study is without merit. AB 2514 simply requires the Commission to complete a study that includes consideration of "all electricity generated by renewable electric generating systems" – the "all-output" case. AB 2514 in no way limits the Commission from considering any other perspective, so long as the "all-output" case is among those studied. Moreover, the NEM Study is being prepared to fulfill the requirements of *both* AB 2514 and D.12-05-06.³

¹ The export-only case examines the costs and benefits of NEM based on the power exported to the grid from NEM systems.

² D.12-05-036 at 13-14.

³³ E3, Net Energy Metering Cost-Benefit Study: Phase 1 Scope and Method (Oct. 16, 2012) at 1.

Even assuming, *arguendo*, that AB 2514 contemplates a more limited analysis, as set forth above, D.12-05-036 calls for the analysis of the export-only case.

PG&E also improperly seeks E3 to opine that the “all-output” case is the correct perspective.⁴ As an initial matter, given that E3 analyzed solely the export-only case in its 2010 NEM study in recognition that customer savings from on-site use of PV output “would result even if there were no NEM,”⁵ Sierra Club and Vote Solar question whether E3 shares PG&E’s view. In any event, because the purpose of the NEM study is to provide comprehensive and unbiased analysis and data to decisionmakers, the NEM study should cover the range of policy perspectives on NEM. It is the Commission that should make the policy choice of how to view NEM, informed by an impartial analysis from E3 and the Energy Division on NEM’s costs and benefits using a full range of possible scenarios and perspectives. The Commission should therefore not indulge PG&E’s efforts to inject its own agenda into what is intended to be an objective and neutral study process.

2. A Sensitivity with a 100% Renewable Premium Reflects Ratepayer Benefits, not “Societal” Benefits

DRA asserts that attributing more than 33% of the renewables premium to NEM exports is equivalent to including societal benefits because there are no ratepayer costs avoided by adding renewables that are not used to either reduce or satisfy RPS requirements. This position fails to consider the broader context of California’s greenhouse gas reduction requirements. The Global Warming Solutions Act (AB 32) requires California to reduce its greenhouse gas emissions (GHGs) to 1990 levels by 2020. To reach this target, the California Air Resources Board’s AB 32 Climate Change Scoping Plan includes emissions reductions from 3000 MW of solar capacity resulting from the California Solar Initiative (and for which NEM is a key enabling mechanism). Reductions attributed to CSI in the Scoping Plan are separate from emissions reductions associated with achieving a 33% RPS. The former results from demand-side production of renewable energy; the latter from supply-side resources. Without the greenhouse gas reductions from CSI on the demand side, these reductions might well need to be achieved from supply-side resources, through a higher RPS. Therefore, it is highly likely that the CSI creates direct financial benefit for ratepayers by avoiding additional RPS requirements. Accordingly, it is reasonable to include a sensitivity that assumes 100% of the renewables premium as an avoided cost associated with NEM exports.

⁴ PG&E Comments, at 4.

⁵ California Public Utilities Commission, Introduction to the Net Energy Metering Cost Effectiveness Evaluation (Mar. 2010) at 48.

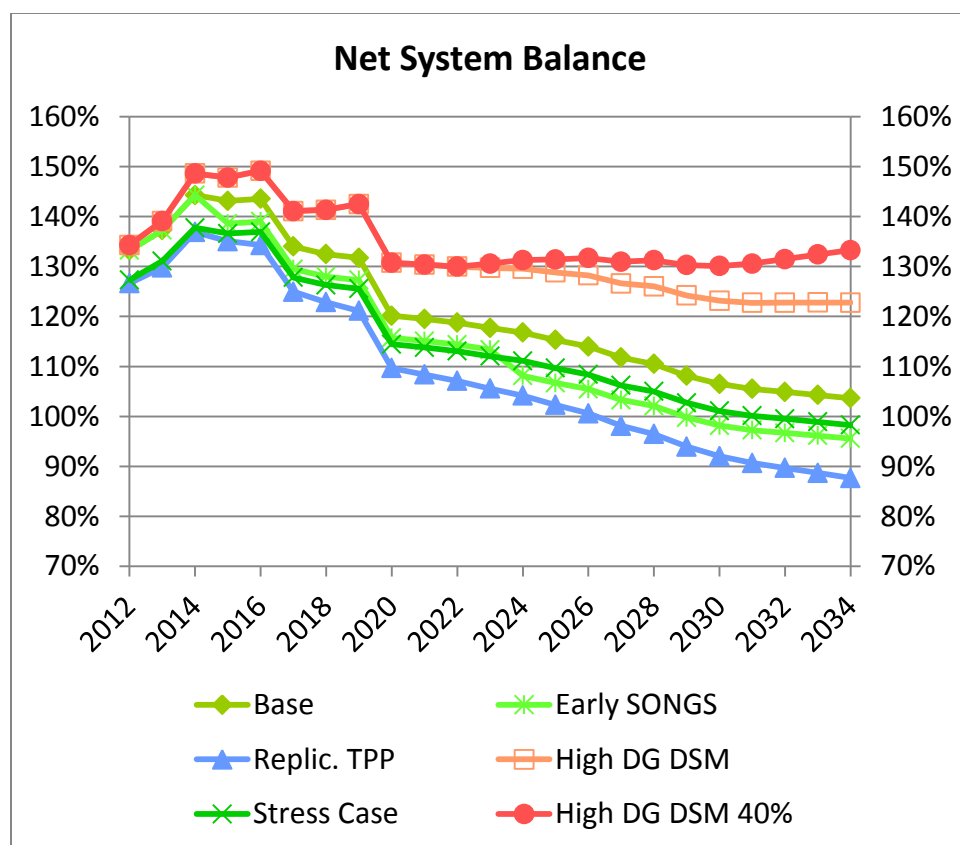
In addition, there is clearly a ratepayer demand for a mix of renewable resources that is greater than just the 33% RPS. PG&E and SDG&E themselves have acknowledged this demand in their proposed “green pricing” programs, which assert that there is a real ratepayer cost associated with going above 33% renewables. These programs also may reflect the IOUs’ desire to compete with community choice aggregators such as the Marin Energy Authority and the City and County of San Francisco that offer or plan to offer customers the opportunity to purchase power that is more than 33% renewable. For example, SDG&E’s proposed Sun Rate program would allow customers to pay a premium to ensure the purchase of enough solar generation to serve 50%, 75%, or 100% of the customer’s energy needs; the associated RECs would be retired on behalf of the customer and could not be used by the utility for RPS compliance.⁶ If the utilities assert there is a ratepayer cost associated with going beyond 33% renewables, then there must also be an avoided cost value associated with NEM exports’ replacement of power that is a maximum of 33% renewable with power that is 100% renewable.

3. DRA and PG&E’s Comments Highlight Reasons Why a Resource Balance Year Should Not Be Included in the Base Case for Evaluating the Costs and Benefits of NEM

DRA’s comments on the resource balance year (RBY) issue illustrate the great practical difficulties which this concept presents. DRA first suggests that E3 and Energy Division consider the 2012 LTPP scenarios (even though these have not yet been finalized).⁷ An inspection of the current versions of these scenarios (see the figure below) show that the year in which a 15% to 17% reserve margin is reached varies from 2019 in the Replicating TPP case to beyond the last year of the forecast period (2034) in the High DG cases. DRA offers no guidance for how the RBY should be selected with any confidence from within this broad range.

⁶ See A. 12-01-008 Scoping Memo, at 1 and 3

⁷ DRA Comments, at 8. The LTPP scenarios are shown in the September 27, 2012 “Scenarios Summary” Excel spreadsheet, available at <http://www.cpuc.ca.gov/NR/rdonlyres/C71D66D1-78A4-4912-98E9-B6870FBFFED3/0/SummaryDataofRevisedScenariosv3.xls>.



DRA then comments that, for projects located in the Los Angeles Basin or in San Diego, an earlier RBY than the current 2017 should be selected, given the expected need to new resources in these local capacity areas (LCAs). These LCAs comprise a significant portion of the southern California market.⁸ DRA’s comments thus illustrate two key problems with the RBY concept: first, a reasonable set of scenarios can provide support for almost any RBY one might want to choose (from 2019 to past 2034), and, second, the reality that capacity is actually likely to be added in large portions of the California market (the L.A. Basin and San Diego LCAs) in the near future for reasons (local capacity needs) that have nothing to do with the overall system capacity balance that the RBY measures. To reflect this reality, E3 and Energy Division would have to create avoided cost models and projections of future DG development that are specific to LRAs as well as to utility and climate zone.

PG&E opines that renewable DG will not avoid the need for flexible generation, that renewable DG will increase the need for flexible generation, and that the RBY for “non-flexible generation” is later in time than the RBY for flexible capacity (although PG&E does not say in exactly what years those different RBYs will occur). The 2010 LTPP modeling conducted by the California Independent System Operator (CAISO) does not support PG&E’s point. In fact,

⁸ *Ibid.*

that modeling showed that the CPUC-mandated cases with 33% renewables did not require new resources to provide flexible capacity, while the CAISO's "all gas" case with just 20% renewables did require additional flexible capacity. This result occurred because the higher output of renewables in the 33% RPS cases unloaded existing gas-fired generation, which was then available to provide the needed flexibility, while in the 20% RPS case the existing gas plants were needed to serve load and thus could not provide the required flexibility.⁹ Thus, higher levels of renewables may result in avoiding the near-term need for new flexible generation by "unlocking" the flexibility inherent in existing resources. This argues that renewables may provide flexible capacity benefits earlier than calculated with a traditional analysis of the supply / demand balance.

Sierra Club and Vote Solar appreciate the opportunity to submit these reply comments on E3's Proposed Scope of Work and look forward to reviewing the study results once they become available.

/s/

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⁹ See R. 10-05-006, ISO Ex. 2400 (Testimony of Mark Rothleder for the CAISO), page 43 and Slide 11.